

### REMARKS / DISCUSSION OF ISSUES

Claims 1-19 are pending and stand rejected. Claims 1 and 12 are independent.

Claims 1-14, and 16-19 are amended for clarification purposes and for non-statutory reasons, for example, remove figure label numbers and to correct minor typographical and grammatical errors. No new subject matter is added.

#### Specification

The Office action notes that the Abstract does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4).

With this response, a new Abstract is hereby presented on a separate sheet. As such, the Abstract is in accordance with 37 CFR 1.52(b)(4).

#### Objection to the Disclosure

The Office action objects to the disclosure for lacking headings.

The Applicants respectfully point out that section headings are not statutorily required for filing a non-provisional patent application under 35 USC 111(a), but per 37 CFR 1.51(d) are only guidelines that are suggested for applicant's use. (See Miscellaneous Changes in Patent Practice, Response to comments 17 and 18 (Official Gazette, August 13, 1996) [Docket No: 950620162-6014-02] RIN 0651-AA75 ("Section 1.77 is permissive rather than mandatory. ... [T]he Office will not require any application to comply with the format set forth in 1.77"). Accordingly, withdrawal of this objection to the disclosure is also respectfully requested.

#### 35 U.S.C. §102

Claims 1-10, 12, 13, and 15-19 stand rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Allen et al. (US Patent Application, Pub. No.: US 2003/0114204 A1), hereinafter Allen. The Applicants respectfully submit that for at least the following reasons, Allen does not anticipate claims 1-10, 12, 13, and 15-19.

In order for a reference to anticipate a claim, MPEP 2131 requires the

reference to teach every element of the claim. It is respectfully submitted that Allen does not teach every element of the Applicants' claim 1, and therefore does not support a prima facie case of anticipation.

The Applicants' claim 1 includes, in part, the elements of:

*A method for a beaconing protocol for a device to participate in an ad hoc communications network of devices, comprising:*

*a. dividing a medium access time into a periodic sequence of at least one superframe beginning at a given start time and having a next superframe of the periodic sequence at any point in time;*

*b. partitioning the superframe into a slotted beaconing period having a plurality of contiguous beacon slots followed by a data transfer period;*

(Emphasis added).

The Applicants have considered Allen in its entirety and respectfully submit that Allen's disclosure does not teach or disclose every element of claim 1.

Allen relates to a beacon assisted asynchronous method of wireless communication which enables initiating and target devices to remain in sleep mode most of the time and to periodically wake up to asynchronously, and directly, communicate with one another. (Abstract). The Office Action cites Allen at paragraphs [0030] as anticipating the above-emphasized features of the Applicants' claim 1. However, Allen's method for a beaconing protocol is completely different from that of the Applicants' claimed invention.

Allen at paragraph [0030] and Figs. 6A and 6B discloses an example of beacon signals drifting into one another. More specifically, [0030] shows a beacon transmit period 40 followed by receive period 42.

While Applicants' claimed invention calls for a beaconing period followed by a data transfer period, Applicants' claimed invention further requires a slotted beaconing period having a plurality of contiguous beacon slots. This requirement of a slotted beaconing period is completely different from Allen. While Allen at

paragraph [0030] discloses a potential situation which may necessitate time-shifting the beacon transmit period to a new time slot, nowhere does Allen disclose or even suggest a beaconing protocol wherein the beaconing period is slotted, having a plurality of contiguous beacon slots.

Because Allen does not disclose all limitations in claim 1, the Applicants respectfully submit that Allen does not support a prima facie case of anticipation and as such, the rejection to independent claim 1 under 35 U.S.C. 102(e) is unfounded as per MPEP 2131 and should be withdrawn.

The Office Action uses substantially the same arguments as set forth with regard to claim 1, alleging that independent claim 12 is anticipated by Allen. However, independent claim 12 is different from claim 1.

For example, claim 12 is directed to an apparatus, whereas claim 1 is directed to a method. Claim 12 includes, in part, the elements of "said slotted beacon processing component and configured to divide a medium into a sequence of at least one superframe comprising a slotted beaconing period and a data transfer period." (Emphasis added).

The Applicants essentially repeat the above arguments for claim 1 and apply them to the specific features recited in independent claim 12. As such, the Applicants respectfully submit that claim 12 is not anticipated by Allen and respectfully request the withdrawal of the rejection.

Dependent claims 2-10, 13, and 15-19 ultimately depend from and incorporate all the features of either allowable claim 1 or 12. Furthermore, each dependent claim includes additional distinguishing features.

For each dependent claim, the Applicants essentially repeat the above arguments from claim 1 and apply them to each respective dependent claim. Thus, the Applicants respectfully submit that dependent claims 2-10, 13, and 15-19 are allowable at least by virtue of their dependency on an allowable parent claim and respectfully request the withdrawal of the rejection to these claims.

35 U.S.C. §103

Claims 11 and 14 stand rejected under 35 U.S.C. § 103(a), as allegedly being unpatentable over Allen. The Applicants respectfully traverse these rejections.

Dependent claims 11 and 14 ultimately depend from and incorporate by reference all the features of either allowable claim 1 or 12. Furthermore, each dependent claim includes additional distinguishing features.

The Office Action alleges by simply providing a conclusory statement that the additional cited features would be obvious to one of ordinary skill in the art as a way of more specifically defining the length of time of the frame. However, KSR requires that an Examiner provide "some articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness." (KSR Opinion at p. 14). An Examiner must "identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does," (KSR Opinion at p. 15). And, the Examiner must make "explicit" this rationale of "the apparent reason to combine the known elements in the fashion claimed," including a detailed explanation of "the effects of demands known to the design community or present in the marketplace" and "the background knowledge possessed by a person having ordinary skill in the art." (KSR Opinion at p. 14). Anything less than such an explicit analysis may not be sufficient to support a prima facie case of obviousness.

The conclusory statement in the Office Action fails to provide any basis upon which the rejection can be sustained and does not allow the applicant to provide any response to refute the allegation.

Furthermore, for each dependent claim, the Applicants essentially repeat the above arguments from claim 1 and apply them to each respective dependent claim. Thus, the Applicants respectfully submit that dependent claims 11 and 14 are allowable at least by virtue of their dependency on an allowable parent claim and the additional cited features. Withdrawal of the rejection under 35 U.S.C. § 103(a) to these claims is respectfully requested.

Conclusion

An earnest effort has been made to be fully responsive to the Examiner's correspondence and advance the prosecution of this case. In view of the foregoing, it is respectfully submitted that all the claims pending in this patent application are in condition for allowance.

If there are any errors with respect to the fees for this response or any other papers related to this response, the Director is hereby given permission to charge any shortages and credit any overcharges of any fees required for this submission to Deposit Account No. 14-1270.

Respectfully submitted,

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